

Application No.: 10/033,748

Docket No.: JCLA7648

REMARKSPresent Status of the Application

This is a full and timely response to the outstanding non-final Office Action mailed on October 7, 2003. Claims 1-19 remain pending of which claims 1-2, 4-5, 8-9 and 17-18 have been amended to more explicitly and more clearly describe the claimed invention. It is believed that no new matter is added by way of these amendments made to the claims or specification or otherwise to the application. Applicants wish to clarify that the foregoing amendment has been made for the purpose of better defining the invention, and not in response to the rejections made based on the prior art. Applicants further submit that no substantive limitations have been added to the amended claims. Therefore, no prosecution history estoppel arises from this amendment.

The Applicants have most respectfully considered the remarks set forth in this Office Action. Regarding the obviousness rejections, it is however strongly believed that the cited references are deficient to adequately teach the claimed features as recited in the amended claims. The reasons that motivate the above position of the Applicants are discussed in detail hereafter, upon which reconsideration of the claims is most earnestly solicited.

Response to 35 U.S.C. 103 rejection

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Long et al. (US 6,441,434, Long hereinafter) in view of Yeh (US6,133,055).

Application N :: 10/033,748

Docket No.: JCLA7648

Claims 1-19 stand rejected under 35 U.S.C. 103(a) as purportedly being unpatentable over the US patent application 0057559 to Long in view of US patent application to Yeh. As described in detail hereinafter, Applicant respectfully asserts that Long in view of Yeh is legally deficient for the purpose of rendering claim 1, 4, 8 or 17 unpatentable for at least the reason that not every element of the claims was taught or suggested by cited reference such that the invention as a whole would have been obvious to one of ordinary skill in the art.

The Office alleges Long teaches forming a source region 20 has a broader part 32 and a narrower part 30, and the drain region 22 has a broader part 36 and a narrower part 34. However, contrary to the Office's assertion, the alleged broader part 32 of the source region 20 and the alleged narrower part 30 of the source region 20 of Long are respectively the deep-doped source subregion and the shallow doped subregion, respectively of a source region 20 of a gate. The broader part of a lightly doped source region or the source region of the present invention, however, refers to the lightly doped source region or the source region that are broader beside one segment of the tortuous gate line, along the longitudinal axis of the tortuous gate line, while the narrower part of the lightly doped source region or the source region refers to the lightly doped source region or the source region that are narrower beside another segment of the tortuous gate line. Similarly, the alleged broader part 36 and the alleged narrower part 34 of Long are the deep-doped drain subregion and the shallow doped drain subregion of a drain region 22, respectively. Beside, Long specifically teaches that the shallow-doped subregions 30 and 34 are substantially symmetric about the gate 44 (col. 5, ln 25-30). Long thus fails to teach that the broader lightly doped source region/drain region is opposite to a narrower lightly doped drain

Application N.: 10/033,748

Docket N.: JCLA7648

region/source region. In summary, the source region 20, which includes the shallow-doped source and the deep-doped source subregions 30, 32 and the drain region 22, which includes the shallow-doped drain and the deep-doped drain subregions 34, 36, are substantially symmetrical about the gate 44 in Long, which contradicts to the teaching of the invention.

The Office further relies on Yeh to cure the deficiency of Long in the teaching of a tortuous gate. Yeh, however similar to Long, also fails to teach the lightly doped source region and the source region beside one segment of the tortuous gate line are broader, and the lightly doped drain region, and the drain region are narrower beside the one segment of the tortuous gate line, and vice versa. Therefore, even if a sufficient motivation were deemed to exist that would allow a proper combination of Long and Yeh, the combination would be legally deficient for the purpose of rendering the claims obvious.

For at least these reasons, Applicants respectfully assert that claims 1, 4, 8 and 17 patentably define over Long in view of Yeh. Since claims 2-3, 5-7, 9-16 and 18-19 are dependent claims which further define the invention recited in claims 1, 4, 8 and 17, respectively, Applicants respectfully assert that these claims also are in condition for allowance. Thus, reconsideration and withdrawal of this rejection are respectively requested.

Application No.: 10/033,748

Docket No.: JCLA7648

CONCLUSION

For at least the foregoing reasons, it is believed that the presently pending claims 1-19 are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,

Date: 12/10/2003
Jiawei Huang
Registration No.: 43,330

J.C. Patents
4 Venture, suite 250
Irvine, CA 92618
Tel.: (949) 660-0761
Fax : (949) 660-0809

Page 11 of 11